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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,951	10/04/2004	Gerardo Perez-Camargo	115808-001	3093
29157 7590 01/05/2009 BELL, BOYD & LLOYD LLP P.O. Box 1135 CHICAGO, IL 60690			EXAMINER MAEWALL, SNIGDHA	
			ART UNIT 1612	PAPER NUMBER
			NOTIFICATION DATE 01/05/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATENTS@BELLBOYD.COM

Office Action Summary	Application No. 10/509,951	Applicant(s) PEREZ-CAMARGO ET AL.	
	Examiner Snigdha Maewall	Art Unit 1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35, 37-52 and 54-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35, 37-52 and 54-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Summary

1. Receipt of Applicant's arguments/remarks, amended claims and RCE all filed on 09/23/08 is acknowledged.

Claims 35, 52, 61 and 67 have been amended. Claims 36 and 53 are cancelled.

Claims **35, 37-52 and 54-68** are pending in this application and claims 35, 37-52 and 54-68 will be prosecuted on the merits.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 35, 37-52 and 54-68 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 35, it is not clear if pet animal lacks vitamin E, or is healthy or condition of pet animal is not clear and thus the claim is indefinite. The claim recites method of improving or maintaining vitamin E, if the pet animal is already healthy and has sufficient vitamin E, then the limitation of improving or maintaining becomes ambiguous. Applicants have not described in claim 1 any specific pancreatic function promoter, liver

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function promoter or intestinal mucosa function promoter, it is not clear how an intestinal mucosa function promoter or pancreatic function promoter will increase lipid absorption and further improve vitamin E absorption. Claim 37 recites a limitation "a gut pH modifier". The claim is indefinite, it is not clear which modifier is being used and modify in which sense, increase or decrease the pH. Claim 39 recites the limitation "emulsifiers, vitamins, minerals and glutathione promoters. The metes and bounds of claim are not defined. Claim 38 recites a limitation buffer, prebiotic and probiotic microorganism, claim 41 recites the limitation "agent and carrier"., claim 43 recites the limitation anti-inflammatory agent, claim 44 recites the limitation omega-3 fatty acid, claim 46 recites the limitation medium chain triglyceride and fatty acid profile, claim 47 recites a limitation "whey protein, the metes and bounds of claims are not defined. Claim 42 recites the limitation proteases having capacity to promote the formation of lipoproteins, how can form lipoproteins when the function of protease is to break protein, the claim is not clear and indefinite. The Examiner suggests reciting specific components. Appropriate corrections are requested.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 35, 37-52 and 54-68 are rejected 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,471,999 in view of US 5,290,571 ('571) or US 5,451,412 ('412) and further in view of (Simpson, KW and Michel, KE. Micronutrient status in patients with gastrointestinal disease. Proceedings ACVIM, Denver, CO, pp. 651-653, 2001), (Suzuki et al. Gastroenterology 1999; 116:431-437 7) and (W0 01/62280).

'999 teach a pet milk powder as nutritional milk that results in reduced gastrointestinal intolerance (abstract). '999 teaches that the milk powder when administered in an effective amount with the nutritional composition reduces gastrointestinal intolerance and that it may further comprise one or more lipid source, protein source, vitamins and minerals, and teaches a specific aspect which comprises lactose (of micro-organism origin), lactase, taurine, arginine and choline (claims 1-9; col. 2, lines 9-lines 26). '999 teach including an alkali in the milk-based powder, which slows the pH, drop in the gastrointestinal tract (col. 2, lines 53-55). '999 teaches that a protein source of whey protein and further supplemented with taurine and a probiotic micro-organism which beneficially effects the host by improving its intestinal microbial balance, such as lactic acid (col. 3, lines 25-40). '999 teaches chicory fibers, inulin, fructooligosaccharides with the probiotic micro-organism have a symbiotic relationship for promoting beneficial effects (col. 4, lines 9-14). '999 teaches that the amount of nutritional composition is to be fed to a mammal each day depends of factors such as age, type of mammal (dogs and cats), and other nutritional sources (col. 4, lines 25-36). Examples 1 and 2 teach mixing the milk powder, galactosidase (lactase amino), vitamins, minerals, and soybean oil, and adding water to provide nutritional supplement

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to dogs and puppies or cats. '999 teaches that a protein source of whey protein and further supplemented with taurine and a probiotic micro-organism which beneficially effects the host by improving its intestinal microbial balance, such as lactic acid (col. 3, lines 25-40). '999 teaches omega fatty acids such as soybean oil and in Examples 1-2 (col. 3, lines 15-20).

'999 do not teach glutathione. However, 571 or 412 teach glutathione.

'571 or '412 teach a composition of whey protein concentrate (abstract). '412 claims 1 and 2 teach compositions containing whey protein concentrate that promote glutathione as nutritional supplements to animals. '571 teach that a suitable source of whey protein is known by the trademark PROMOD, which contains whey protein and soy lecithin (col. 5, lines 34-41).

Soy lecithin is taught by applicant in instant Example 2 to be an appropriate liver function promoter. '571 teach that glutathione GSH promotion is a major function of the whey protein concentrate (w.p.c.) (col. 1, lines 30-37). '571 teaches the production of glutathione in the spleen, heart, liver is greater in mice fed with w.p.c, than mice fed with egg white protein (col. 4, lines 39-46). '571 teaches that the object of the invention is to provide a method for increasing the concentration level of glutathione in the organs and enhancing resistance to bacterial infection of mammals through the use of w.p.c, via oral administration (col. 10, lines 46-57). '571 also teaches inclusion of vitamins B1 and B2 with w.p.c. (claim 1-3, col. 11, lines 55-57).

The references disclosed above do not teach lipid assimilation, however, Simpson et al. disclose that vitamin E is a fat-soluble vitamin that is absorbed only with

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long chain fatty acids. A defect in either the absorption or digestion of lipid can therefore lead to deficiencies in this and other vitamins, due to their binding with unabsorbed fatty acids (Simpson, KW and Michel, KE. Micronutrient status in patients with gastrointestinal disease. Proceedings ACVIM, Denver, CO, pp. 651-653, 2001). Hence, a pet with low lipid digestibility is susceptible to several potential nutritional deficiencies, which can compromise its health. (see the entire articles of record).

A skilled artisan would thus have been motivated to provide a pet with an edible composition comprising liver function promoter in order to help in lipid assimilation which in turn helps in improving vitamin E absorption with a reasonable expectation of success based on the teachings of the disclosed references.

'999 reference above teaches the pancreatic function promoter (lipase) and intestinal mucosa function promoter such as probiotic microorganism, however, does not correlate the same with lipid absorption. Suzuki et al. disclose that bacterial or porcine Lipase with high or low fat diets optimizes fat absorption (see the entire article of record). It would have been obvious to the one of ordinary skilled in the art at the time the invention was made to incorporate pancreatic function promoter and intestinal mucosa function promoter in a feed composition and improve lipid absorption capacity of a pet animal with a reasonable expectation of success. WO correlates the lipid absorption capacity with vitamin E absorption. As such, the pancreatic function promoter would have improved vitamin E absorption with the enhanced absorption of lipid in a pet animal in view of WO.

A skilled artisan would thus have been motivated to formulate a composition comprising liver function promoter, pancreatic function promoter and intestinal function promoter with a reasonable expectation of success in order to help increase lipid absorption and vitamin E absorption of a pet animal.

Response to Arguments

7. Applicant's arguments filed 35, 37-52 and 54-68 have been fully considered but they are not persuasive.

Applicant argues that the cited references fail to recite the claimed amounts of liver function promoter, pancreas function promoter and intestinal mucosa function promoter. In response to this argument, The Examiner respectfully states that the independent claims as recited do not specify any specific liver function promoter, pancreatic function promoter or intestinal mucosa function promoter, the claims as recited are very broad and read on at least one of the components representing the various promoters that applicants have claimed. Furthermore as discussed in the rejection above, the correlation of maintaining vitamin E versus lipid absorption is not clear. Applicant further argues that the references of Bounous I and II do not disclose edible composition on a dry matter basis. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir.1986). Furthermore, the test for obviousness is not whether the

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features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instant case the references teach all the promoters as claimed in instant claims, since no specific component has been recited in claims, the claims do not commensurate with the scope of the disclosure. Applicant argues that no acidifying agent is disclosed, however, no correlation has been presented with vitamin E absorption and acidifying agent.

6. Claims 35, 37-52 and 54-68 are rejected 35 U.S.C. 103(a) as being unpatentable over US Patent No. Fuchs et al WO 02/15719 ('719) in view of US 5,290,571 ('571) or US 5,451,412 ('412) and further in view of (Simpson, KW and Michel, KE. Micronutrient status in patients with gastrointestinal disease. Proceedings ACVIM, Denver, CO, pp. 651-653, 2001), (Suzuki et al. Gastroenterology 1999; 116:431-437 7) and (W0 01/62280).

'719 discloses a method of treatment which comprises administering an effective amount of the composition which contains whey protein (an intestinal mucosa function promoter according to applicant) to improve, promote, maintain intestinal function and mucins a patient or companion animal (abstract, claims 1-2 and 14-20, pg. 6 lines 5-10; pg. 12 lines 3-21). Example 4 teaches a nutritional supplement comprising whey protein and probiotic bacteria. '719 teaches that the nature of whey protein and the fact that it is

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capable of being easily digested, the composition has a beneficial effect in patients with limited appetite due illness, surgery, chronic gastritis, etc (pg. 4, line 31-pg. 5, line 6), and that the addition of a probiotic micro-organism provides the advantage of restoring the natural balance of the intestinal flora following antibiotic therapy (pg. 6, lines 7-10).

Whey protein is taught by applicant to be a fat transportation aid agent and carrier (instant spec pg. 10, 13-20). , '719 also teaches including a prebiotic (claim 13, pg. 5, lines 27-30). '719 teaches including taurine and vitamins (claim 12, pg. 5, lines 18-25; pg. 6, lines 27-29), '719 teaches a lipid source including omega-3 fatty acids (abstract, claim 1). , '719 teaches a nutritional supplement comprising whey protein and omega-3 fatty acids (abstract, claims 1-2).

'719 does not teach glutathione. However, 571 or 412 teach glutathione. '571 or '412 teach a composition of whey protein concentrate (abstract). '412 claims 1 and 2 teach compositions containing whey protein concentrate that promote glutathione as nutritional supplements to animals.

'571 teaches that a suitable source of whey protein is known by the trademark PROMOD, which contains whey protein and soy lecithin (col. 5, lines 34-41).

Soy lecithin is taught by applicant in instant Example 2 to be an appropriate liver function promoter. '571 teaches that glutathione GSH promotion is a major function of the whey protein concentrate (w.p.c.) (col. 1, lines 30-37). '571 teaches the production of glutathione in the spleen, heart, liver is greater in mice fed with w.p.c, than mice fed with egg white protein (col. 4, lines 39-46). '571 teaches that the object of the invention is to provide a method for increasing the concentration level of glutathione in the organs

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of a pet animal with a reasonable expectation of success. WO correlates the lipid absorption capacity with vitamin E absorption. As such pancreatic function promoter would have improved vitamin E absorption with the enhanced absorption of lipid in a pet animal in view of WO.

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cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir.1986). Furthermore, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instant case the references teach all the promoters as claimed in instant claims, since no specific component has been recited in claims, the claims do not commensurate with the scope of the disclosure. Applicant argues that no acidifying agent is disclosed, however, no correlation has been presented with vitamin E absorption and acidifying agent. Applicant is looking for exact recitation of claim limitations; however, the rejection is of obviousness and not of anticipation. The specification provides support for only specific promoters in specific pet animal with specific fat digestibility, the scope of the claims as recited is very broad and the disclosure does not provide unexpected results substantiated with technical data to support the scope.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Snigdha Maewall whose telephone number is (571)-

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272-6197. The examiner can normally be reached on Monday to Friday; 8:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Krass can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-0580.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Snigdha Maewall/

Examiner, Art Unit 1612

/Gollamudi S Kishore /

Primary Examiner, Art Unit 1612